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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,424	10/08/2003	Giselher Herzer	P99,2335-02	7294

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PATENT DEPARTMENT
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EXAMINER	
SHEEHAN, JOHN P	
ART UNIT	**PAPER NUMBER**
1742	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/18/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/681,424	HERZER ET AL.	
	Examiner	Art Unit	
	John P. Sheehan	1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *4,5,17,18 and 51-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *4,5,17,18 and 51-56* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 16, 2006 has been entered.

Specification

2. The disclosure is objected to because of the following informalities:

I. The specification is objected to in that in paragraph 0065 US Patent Application Serial Numbers are recited. However, the disclosure does not reflect the current status of the cited applications.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 4, 5, 17, 18 and 51-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

I. Each of claims 4 and 17, lines 12 to 14, recites the new claim limitation, "df/dH < 1000 Hz/Oe, where f is the resonant frequency of the annealed article and H is a magnetization field strength"", however this limitation does not find support in the application as filed. The Examiner questions whether each occurrence of "f" should be –f_r—such that "df/dH" and "f" should be, --df_r/dH-- and –f_r—respectively as is disclosed for example, in Figure 2 and paragraph 0035. This rejection can be over come by changing "f" and "df/dH" to –f_r—and --df_r/dH—respectively.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4, 5, 17, 18 and 51 to 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. (Liu, US Patent No. 5,676,767) taken in view of Hasegawa (US Patent No. 5,628,840).

Liu teaches improving the processing efficiency for the manufacture of an amorphous alloy for use in a magneto mechanical electronic article surveillance marker by continuously annealing the amorphous alloy in a magnetic field (column 2, lines 15 to 29). In view of applicants' use of the open claims language, "comprising" applicants' claims do not preclude the magnetic filed taught by Lui. Liu discloses that during annealing the amorphous alloy is under tension (column 5, lines 14 and 15). Liu teaches amorphous alloy thicknesses that are encompassed by the claims (e.g., column 5, line 40).

Hasegawa teaches an amorphous alloy for use in magneto mechanical electronic article surveillance markers having a composition that overlaps the alloy composition limitations recited in the instant claims (column 3, lines 1 to 25) and specific example alloys that are encompassed by the instant claims (column 5, lines 20 to 43).

The claims and Liu et al. differ in that Liu et al. do not teach the alloy composition limitations recited in the instant claims. Also each of Liu and Hasegawa are silent with respect to the property, $dH_k/d\sigma>0$ and $df_r/dH < 1000$.

One of ordinary skill in the art at the time the invention was made would have been motivated to apply Liu et al.'s process to Hasegawa's alloy so as to improve the processing efficiency as taught by Liu et al. Further, although each of the references is silent with respect to $dH_k/d\sigma>0$, the alloys taught by Hasegawa at least overlap the alloy composition recited in the instant claims and would therefore be expected to possess all of the same properties as recited in the instant claims, including $dH_k/d\sigma>0$ and $df_r/dH < 1000$, In re Best, 195 USPQ, 430 and MPEP 2112.01.

> "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

3. Claims 4, 5, 17, 18 and 51 to 56 are rejected under 35 U.S.C. 103(a) as being obvious over each of Herzer (US Patent No. 6,359,563) or Herzer et al. (US Patent No. 6,254,695.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Each of these references teaches a process that overlaps the instantly claimed process (Herzer '563 Column 7, line 36 to column 8, line 40 and Herzer et al. '695, column 4, line 45 to column 5, line 50). The alloys disclosed by each of the Herzer references contains 15 to 30 % Fe, while the instant claims recite "an Fe content larger than about 30 at%" (emphasis added by the Examiner). In view of the word, "about" used to describe the Fe content in applicants' claims, applicants claimed Fe content is considered to overlap the Fe content taught by each of the Herzer references.

The references and the claims differ in that references do not teach the exact same proportions as recited in the instant claims and are silent with $df_r/dH < 1000$ Hz/Oe and $dH_k/d\sigma > 0$.

However, one of ordinary skill in the art at the time the invention was made would have considered the invention to have been obvious because the alloy proportions taught by each of the references overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

> "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages", In re Peterson 65 USPQ2d 1379 (CAFC 2003).

Also, In re Geisler 43 USPQ2d 1365 (Fed. Cir. 1997); In re Woodruff, 16 USPQ2d 1934 (CCPA 1976); In re Malagari, 182 USPQ 549, 553 (CCPA 1974) and MPEP 2144.05. Further, although each of the references is silent with respect to $dH_k/d\sigma>0$ and $df_r/dH < 1000$, the alloys taught by the references at least overlap the alloy composition recited in the instant claims and would therefore be expected to possess all of the same properties as recited in the instant claims, including $dH_k/d\sigma>0$ and $df_r/dH < 1000$, In re Best, 195 USPQ, 430 and MPEP 2112.01.

> "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

Response to Arguments

4. Applicant's arguments filed October 16, 2006 have been fully considered but they are not persuasive.

5. Applicants, referring to Hasegawa's Table 5, argue that the disclosed alloys in Table 5 that contain Mo do not possess a df/dH that is less than 1000 Hz/Oe as recited

in the instant claims. The Examiner is not persuaded. The teachings of a reference are not limited to merely that which is set forth in the examples. Instead "[a] reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art", see MPEP 2123 and In re Widmer, 147 USPQ 518, 523 (CCPA 1965). In the instant case, as set forth in the statement of the rejection, Hasegawa teaches an amorphous alloy for use in magneto mechanical electronic article surveillance markers having a composition that overlaps the alloy composition limitations recited in the instant claims (column 3, lines 1 to 25). Further, applicants have not explained how they arrived at the conclusion that the disclosed alloys in Hasegawa's Table 5 that contain Mo do not possess a df/dH that is less than 1000 Hz/Oe.

Applicants, referring to their previous response argue that, "the Hasegawa reference also does not teach that alloys having this composition exhibit $dH_k/d\sigma>0$". The Examiner is not persuaded. Although each of the references is silent with respect to $dH_k/d\sigma>0$, the alloys taught by Hasegawa at least overlap the alloy composition recited in the instant claims and would therefore be expected to possess all of the same properties as recited in the instant claims, including $dH_k/d\sigma>0$, In re Best, 195 USPQ, 430 and MPEP 2112.01.

> "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not

> necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

6. Applicants' argument regarding the modification of Liu's alloys in accordance with the teachings of Hasegawa (applicants' response, page 7, the last paragraph) is not persuasive. This rejection of the claims is not based on the modification of Liu's alloy composition in accordance with Hasegawa's teachings, but rather is based on the fact that one of ordinary skill in the art would have been motivated to apply Liu's process to Hasegawa's alloy so as to improve the processing efficiency as taught by Liu.

7. Applicants' arguments that the Herzer references do not teach $dH_k/d\sigma>0$ and $df_r/dH < 1000$ is not persuasive. The alloys taught by the Herzer references at least overlap the alloy composition recited in the instant claims and would therefore be expected to possess all of the same properties as recited in the instant claims, including $dH_k/d\sigma>0$ and $df_r/dH < 1000$, In re Best, 195 USPQ, 430 and MPEP 2112.01.

> "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

8. Applicants' argument that it was not predictable from the prior art that an alloy having a composition within the range set forth in the claims would have a positive value for $dH_k/d\sigma$ and $df/dH < 1000$ Hz/Oe is not persuasive. The alloys taught by the

references at least overlap the alloy composition recited in the instant claims and would therefore be expected to possess all of the same properties as recited in the instant claims, including $dH_k/d\sigma>0$ and $df_r/dH < 1000$, In re Best, 195 USPQ, 430 and MPEP 2112.01.

> "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a prima facie case of either anticipation or obviousness has been established, In re Best, 195 USPQ 430, 433 (CCPA 1977). 'When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.' In re Spada,15 USPQ2d 655, 1658 (Fed. Cir. 1990). Therefore, the prima facie case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. In re Best,195 USPQ 430, 433 (CCPA 1977)." see MPEP 2112.01.

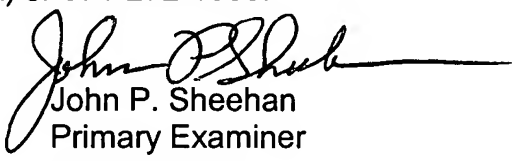
Finally, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Sheehan whose telephone number is (571) 272-1249. The examiner can normally be reached on T-F (6:45-4:30) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John P. Sheehan
Primary Examiner
Art Unit 1742

jps